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**Re: FCC NPRM 04-29**

Sirs,

I would like to submit a short comment in response to NPRM 04-29. While I am opposed to the current Access BPL proposal and believe it will result in unacceptable harmful interference to the amateur radio service, I also recognize that NPRM 04-29 has a high likelihood of being accepted by the commission. **I would like to make a strong suggestion for interference mitigation in the rules should Access BPL be implemented.**

Based upon my personal experience with the difficulty getting the local power company to remedy harmful interference caused by sparking from poor and dirty insulators on their power lines, I have little expectation that the NPRM's suggestion of case by case BPL interference mitigation by the power companies will be effective or fair. In most cases it takes months for the power company to respond to an interference complaint. This is an unreasonable burden to place on the amateur radio operator who is being interfered with. And in the case of mobile operators, they are only in each area for a small amount of time, and the widespread implementation of Access BPL can cause interference repeating over many areas of travel. It is virtually impossible for mobile radio operators to contact each power company in every area they travel. The net result will be a high level of unmitigated harmful interference and wide areas that are unusable for mobile amateur radio operation.

**The NPRM does suggest one of the methods the power companies might use to mitigate harmful interference to the amateur service is to 'notch out' all BPL transmissions covering the relatively small amount of spectrum below 55 MHz used by the amateur radio service bands. I would like to suggest this be made mandatory in the rules.** As demonstrated by the existing in-home BPL industry (HomePlug Powerline Alliance, Paragraph 21 of the NPRM) the notching out of BPL transmissions across the amateur band frequencies below 30 MHz is easy to implement, has already been standardized, and has significantly reduced the chance of harmful interference to the weak signal operation common in amateur radio. This simple change to the Access BPL regulations will go a long way towards resolving the harmful interference problem for the amateur radio service **In turn this will greatly reduce or eliminate the inevitable flood of part 15 harmful interference complaints that the FCC and utilities implementing Access BPL will receive.**

**Regarding the importance of amateur radio and the impact of Access BPL interference on the service:**

Amateur radio operators are a very important source of communications in times of local, regional and national emergencies. The amateur radio service also provides a fertile and unique training ground for our next generation of technologists, scientists and engineers, of which I am an example. I was first licensed as an amateur radio operator at age 14 in 1971. That led me to a degree in electrical engineering and subsequent career in Silicon Valley. I have started several successful high-tech companies, which in turn have resulted in the introduction of numerous successful products and technologies to the market and have provided significant employment to our community.

While harmful interference to amateurs has been denied by the Access BPL testers and utilities, the evidence clearly demonstrates that many of the current Access BPL tests are generating severe and harmful interference to both fixed and mobile amateur radio operators. (See the ARRL BPL page for actual test measurements and video. This interference totally eliminates weak to medium level amateur radio signals and even harmfully degrades strong signals.

Access BPL testers are noted in NPRM 04-29 as saying that they had not received any complaints of interference. Many Access BPL tests were run in neighborhoods without amateur radio operators. In other cases, when interference was detected, the local amateur radio operators did not know what it was, where it was coming from or who to contact. One utility even stated that while they actually were causing interference to mobile amateur radio operations, it was not 'harmful interference' in their eyes as the vehicle would certainly move out of the interference area. (This may be difficult if BPL is widely implemented.) **This is about as reasonable as saying a periodic interruption to a telephone conversation is not harmful interference.** Also, many mobile radio operators operate while parked at the side of the road. They should not be required to hunt for a 'BPL interference free zone'.

One can also look at the frequencies allocated the Amateur Radio service in a similar manner to public trust of the national park system. Access BPL in its current form is roughly equivalent to pollution on a wide scale. (Imagine a thick film of smog over the Grand Canyon or Yosemite for an accurate analogy.) **Modifying Access BPL technologies to eliminate this harmful interference, or at least notching out interference to the amateur radio bands below 55 MHz, is the only reasonable solution.**

Regards,  
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